

Remarks/Arguments

Claims 1-2, 4-9, 13, 17-21 are canceled without prejudice or disclaimer. Claims 22-31 are added. Claims 3, 10-12, 15-16 are amended to correct their dependencies. Claim 14 has been withdrawn from consideration. The claims have been added/amended to clarify and broaden the scope of the claim language, and have not been changed in view of the applied references. Support for the added and amended claims is found in the Specification. No new matter is added. Claims 3, 10-12, 15-16, and 22-31 are pending for consideration.

In view of the above amendments and following remarks, reconsideration of the subject application is respectfully requested.

35 USC § 102(b) Rejection

Claims 1, 2, 3, 5, 7 and 17 have been rejected under 35 U.S.C. 102(b) as being anticipated by U.S. patent application 2002/0111756 to *Modgil*. This rejection is moot in view of the cancelation of these claims, however, as the rejection may be applied against the newly added claims, Applicant respectfully traverses the rejection and contends that *Modgil* does not disclose each and every element of Applicant's independent claim(s) and is therefore an improper basis for a 102(b) rejection.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference...The identical invention must be shown in as complete detail as contained in the ...claim. MPEP §2131

Applicant's independent claim 22 recites: a battery safety monitor, comprising: at least one battery comprising at least one cell string and providing at least one output signal; a Zener diode operatively coupled to the at least one output signal of the at least one battery and capable of reducing a received voltage therefrom; a detector operatively coupled to an output of the Zener diode to determine a non-normal condition; a microcontroller operatively coupled to the output of the Zener diode and to the at least one output signal of the at least one battery; and an isolator series coupled to an output of the microcontroller and providing an isolated signal to an

external monitoring device.

In contrast, *Modgil* is directed to an automotive security/accident system designed for easy and external installation to an automotive battery (see col. 7, lines 26-35, Figs. 1 and 2, for example). Specifically, it is designed for theft deterrence or accident mitigation. For example, in the Summary of the Invention, *Modgil* states that the system includes a motion sensor (col. 7, lines 49-50, for example), theft deterrence (col. 8, lines 8-18, for example), battery analysis (col. 8, lines 19-33, for example) and other accident safety disconnect capabilities (col. 8, lines 33-44, for example).

Modgil describes several combinations of electrical systems to accomplish his security/accident system. Figs. 3, 12, 15D, and 16D illustrate the only relevant schematic/circuit diagrams for his system.

Nowhere in Figs. 3, 12, 15D and 16D, or in the disclosure of *Modgil*, is there the express combination of elements as recited in Applicant's independent claim 22. For example, Fig. 3 describes a motion sensor embodiment, with a constant current source 342 coupled to the battery which powers the microcontroller 300. There is no Zener diode mentioned in the description of Fig. 3 (the constant current source 342 is not a Zener diode, as detailed in *Modgil's* descriptions below). An electrical activity sensor 302 is coupled to the battery 104 – not to any *output* of any Zener diode. See also *Modil's* col. 12, lines 44-60, for example. Thus, Fig. 3 does not disclose all the elements recited in Applicant's independent claim 22.

Fig. 12 is the schematic diagram between a high current MOSFET switch 356, the constant current source 342, and the microcontroller 300 (see col. 18, lines 46-52). The constant current source 342 is described as being an LM327 NVR 1200. A 18V Zener diode 1232 is described; however, it is used to protect the MOSFET 1224 using its shunting capability (see col. 19, lines 42-47). The Zener diode 1232 does not output any signal, as evidenced that it is coupled to the chassis ground 346. Also, the MOSFET 1224 and the thermal sense signal are driven by 5V source 1238. Therefore, neither the MOSFET 1224 nor the thermal sense signal receive power or a signal from the Zener diode 1231. Thus, Fig. 12 does not show a “detector *operatively* coupled” to a Zener diode, or “operatively coupled to an *output* of the Zener diode to

determine a non-normal condition.” Additionally, there is no “microcontroller operatively coupled to the output of the Zener diode ...”

Fig. 15D illustrates a battery reporting schematic. The only Zener diode shown is a 18V Zener diode connected to the cigarette lighter plug and shunted to ground. This configuration is consistent with *Modigl's* use of a Zener diode for shunt protection, and not for providing any output. Therefore, Fig. 15D and its associated description do not disclose all the elements of Applicant's independent claim 22.

Lastly, Fig. 16D illustrates a telemetry schematic. Similarly, the only Zener diode shown is a 18V Zener diode connected to the cigarette lighter plug and shunted to ground. Thus, it is clear that this embodiment does not disclose all the elements recited in Applicant's independent claim 22.

In view of the above, it is readily apparent that *Modil's* Figs. and description do not disclose, nor teach all the elements of Applicant's subject matter as recited in independent claim 22. Claims 3, 10-12, 15-16, and 23-31 depend from claim 22. As such, *Modil* fails to anticipate the claims.

Accordingly, for at least the above reasons, Applicant respectfully requests the withdrawal of this rejection.

35 USC § 103(a) Rejections

Claims 4, 6, 8-13 and 18-21 have been rejected under 35 U.S.C. 103(a) as being obvious in view of *Modgil* and *Kopera* (U.S. Patent No. 5,646,534). The rejection of the canceled claims is considered moot, however, to the extent that this rejection may be applied against the amended and newly added claims, this rejection is respectfully traversed.

Kopera is directed to a battery monitoring system for electric vehicles. *Kopera* is principally brought in by the Office Action for disclosing an optoisolator. However, *Kopera* is completely silent regarding the disclosure or teaching found lacking in *Modgil*, as discussed above (for example, *inter alia* Zener diode). Therefore, *Modgil* and *Kopera*, individually or even

in combination, do not disclose or suggest all the features of Applicant's claimed subject matter. As such, *Modgil* and *Kopera* do not render obvious Applicant's subject matter as claimed in independent claim 22.

Since claims 10-12, 15-16, and 23-31, depend from claim 22, for at least the same reasons stated above, they too are not obvious. In view of the above, Applicant respectfully requests the withdrawal of this rejection.

Claim 15 has been rejected under 35 U.S.C. 103(a) as being obvious in view of *Modgil* and *Hemminger et al.* (U.S. Patent No. 6,628,207). This rejection is respectfully traversed.

Hemminger is directed to power outage reporting system, using a battery to power a modem to communicate with the reporting center. *Hemminger* is brought in by the Office Action as disclosing a lithium battery. Notwithstanding this assertion, there is no description or teaching in *Hemminger* regarding the subject matter found lacking in *Modgil*, as discussed above. Therefore, individually or in combination, *Modgil* and *Hemminger*, do not disclose or suggest all the features recited in Applicant's independent claim 22.

Claim 15 depends from claim 22. In view of the above, Applicant respectfully requests the withdrawal of this rejection.

Claim 16 has been rejected under 35 U.S.C. 103(a) as being obvious in view of *Modgil*, *Kopera* and *Hemminger et al.* (U.S. Patent No. 6,628,207). This rejection is respectfully traversed.

As mentioned above, neither *Kopera* or *Hemminger* disclose or suggest the features found lacking in *Modgil*. Therefore, even if combined, the combination of *Modgil*, *Kopera*, and *Hemminger* do not disclose all the elements recited in Applicant's independent claim 22.

Claim 16 depends from independent claim 22. In view of the above, Applicant respectfully requests the withdrawal of this rejection.

Application No. 10/802,562
Inventor: Coleman

Navy Case # **95998**

Conclusion

Applicant respectfully submits that claims 3, 10-12, 15-16, and 22-31 of the present application are in condition for allowance.

Respectfully Submitted,

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